

Appendix H

Tongass National Forest

Cooperative Fisheries Planning Status Report

(ANILCA (P.L. 96-487) Sec. 507-B)

Preface

Public Law 96-487, December 2, 1980, the Alaska National Interest Lands Conservation Act (ANILCA), recognizes the importance of Southeast Alaska's fishery and the importance of fish habitat on the Tongass National Forest by giving the Secretary of Agriculture direction for planning of fisheries enhancement. Sections 507 (a) and (b) state:

(a) The Secretary of Agriculture is directed to implement a cooperative planning process for the enhancement of fisheries resources through fish hatchery and aquaculture facilities and activities in the Tongass National Forest. Participation in this process shall include but not be limited to the State of Alaska and appropriate nonprofit aquaculture corporations. The Secretary may contract with private, nonprofit associations for services in such planning.

(b) Each subsequent revision of National Forest management plans under the Forest and Rangeland Renewable Resources Planning Act shall contain a report on the status of the planning process undertaken under this paragraph, including, but not limited to, a description of current hatchery and aquaculture projects, an analysis of the success of these projects, and a prioritized list of projects anticipated for the duration of the management plan. The report shall be submitted by the Secretary to the Congress with recommendations for any legislative action which the Secretary may deem necessary to implement the proposed hatchery and aquaculture projects.

The following review is presented to meet the requirement of ANILCA Section 507b.

Introduction

From a global perspective, there is no place on Earth that produces the number and diversity of salmon as does Southeast Alaska. Salmon are valuable social, cultural, and economic resources. Salmon fishing and processing is the number one private industry employer in Southeast Alaska. Numerous species and discrete spawning populations (stocks) of Pacific salmon, steelhead trout, and anadromous cutthroat trout exist on the Tongass National Forest. Recent research indicates that genetic diversity of cutthroat trout in Southeast Alaska is very high.

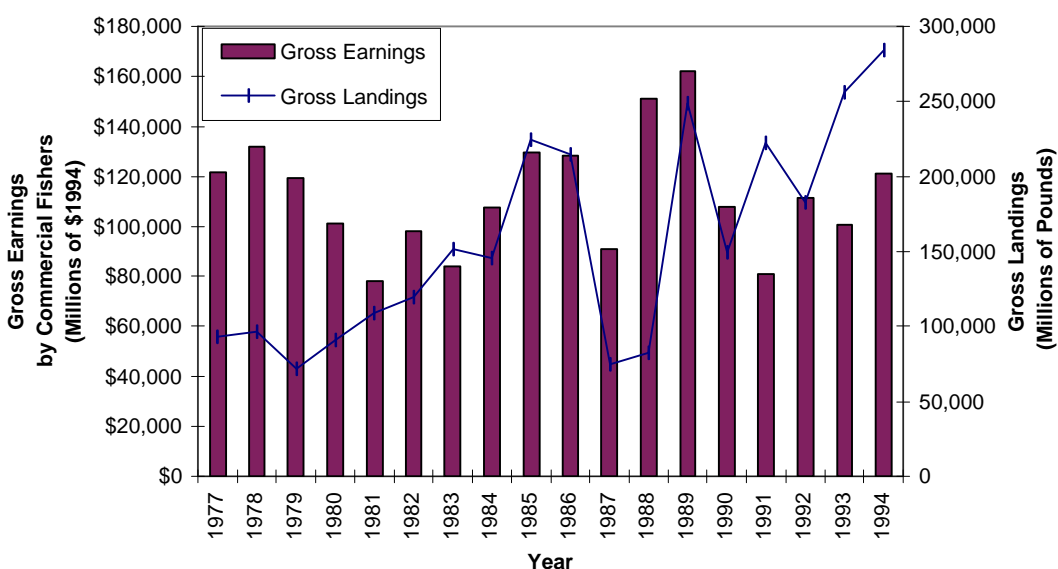
Fishing in Southeast Alaska is classified into the three major categories of subsistence fishing, sportfishing, and commercial fishing. From salmon produced in Southeast Alaska, the annual commercial salmon harvest (1977-1994) averages over 173 million pounds with earnings of over \$112 million (1994 \$'s). The harvesting and processing of salmon provides over 5,000 direct jobs, or the equivalent hours of 3,500 full-time jobs (year round positions) in Southeast Alaska. In 1994, over 227 million pounds of salmon were harvested worth over \$96 million in Southeast Alaska (Figure 1).

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In 1994, 2,337 limited entry permits were fished (Figure 2). These permits are issued to individuals, but represent small businesses employing up to 10 people each. The average value of limited entry permits have increased by a factor of 3.5 since 1977. For some salmon fisheries the value of a permit has increased by a factor of 6 since 1977.

Harvests of salmon have been at record or near record levels in Southeast Alaska for the past few years. These increases are thought to be primarily associated more with favorable oceanic conditions rather than any change in freshwater habitats. Since the early 1980's oceanic productivity for salmon has improved due to a number of factors. For instance, coho salmon smolt (juvenile salmon migrating to the sea) to adult (salmon returning from the sea) survival long-term average is about 5 percent. Recent coho smolt to adult survival has approached 30 percent in some Southeast Alaska locations due to more favorable ocean conditions. Increases in hatchery-produced salmon have contributed to the recent increased commercial harvest. For example, up to 50 percent of the commercial chum salmon harvest in SE Alaska is from hatchery production.

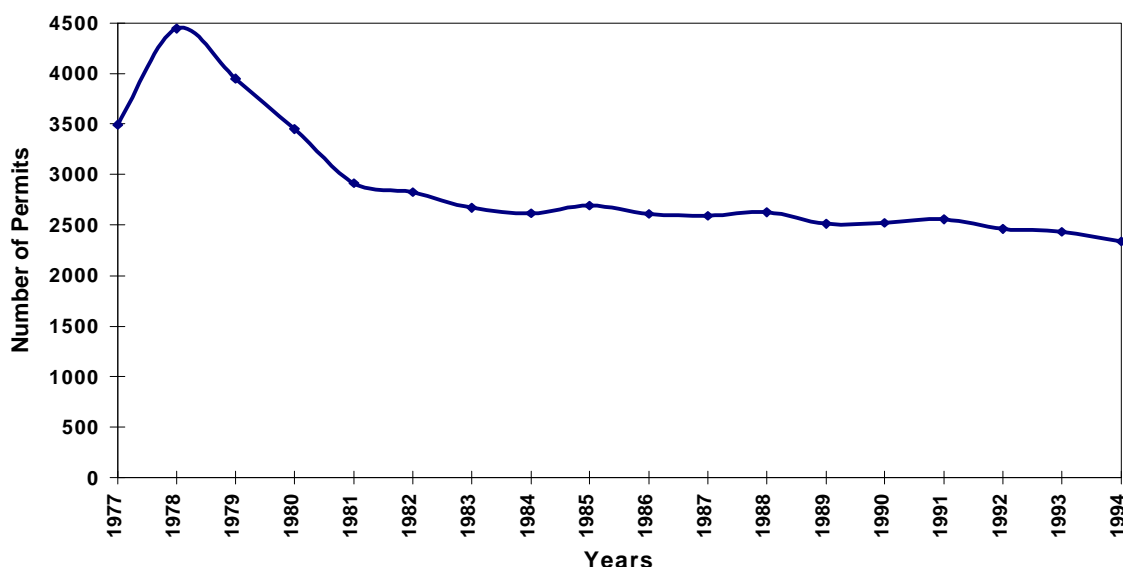
Figure 1.
Commercial Harvest and Value of Salmon Produced from Southeast Alaska (1977-1994)



The sportfishing industry also has significant economic and employment effects on Southeast Alaska. Healthy salmon habitats and large returns of adult salmon are vital to the growing recreational fisheries in Southeast Alaska. For 1984-1993, the number of anglers fishing has increased 62 percent while the number of Fish User Days (FUD's) on the Tongass National Forest have increased 44 percent. One FUD is equivalent to 12 hours of fishing.

FUD's on the Tongass National Forest totaled about 116,000 in 1991, 125,700 in 1992, 122,600 in 1993 and 146,515 in 1994 - a record year for coho. Based on a 1991 economic analysis (using 1988 data), anglers in the region spent an average of \$433 (1994 \$'s) per FUD fishing for salmon, or over \$50 million in 1991, \$54 million in 1992, \$53 million in 1993, and \$62 million in 1994. These dollar figures represent both resident and non-resident expenditures made in Southeast Alaska for fishing activities. Travel costs to Southeast Alaska are not included in this analysis.

Figure 2.
Limited Entry Salmon Permits Fished in Southeast Alaska (1977-1994)



Saltwater charter fishing service providers are one of the fastest growing business sectors in Southeast Alaska. The total number of charter registrations increased 20 percent from 1993 to 1994 (607 in 1993; 727 in 1994). About 88 percent of registered charter boat owners are Alaska residents, while nonresidents comprise about 12 percent. Charter fishing service providers are based throughout Southeast Alaska communities. Distribution of charter registrations (Table 1) indicates the importance of these businesses to the economy of the region.

Table 1.
Registered Charter Operators by Southeast Alaska Communities (1994)

Community	Charter Registrations	Community	Charter Registrations
Ketchikan	141	Angoon	23
Prince of Wales	90	Hoonah	12
Yes Bay	21	Pelican	5
Petersburg	34	Tenakee Springs	4
Wrangell	35	Juneau	103
Sitka	160	Haines	11
Elfin Cove	19	Skagway	4
Glacier Bay	3	Yakutat	15
Gustavus	21		

Freshwater fishing guide registrations under permit by the Forest Service (1992=130; 1993=146; 1994=136) indicate yet an additional business enterprise dependent on fishery resources of the region, especially wild stocks on the Tongass National Forest. About 90 percent of the registered freshwater fishing guides are Alaska residents.

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The subsistence harvest of salmon is estimated to be in excess of 1.2 million pounds annually. Harvesting salmon in traditional areas is important for sustaining the Tlingit, Haida, and Tsimshian cultures and is an important part of the customary and traditional lifestyle of many Alaska residents. In accordance with ANILCA, the Federal government assumed management responsibility for wildlife and inland fish subsistence management on Federal public lands in Alaska on July 1, 1990. The subsistence program is directed by the Federal Subsistence Board (U.S. Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs, the U.S. Department of Agriculture - Forest Service, and a Chair appointed by the Secretary on Interior) in Alaska. The Alaska Regional Forester represents the Department of Agriculture. The U.S. Fish and Wildlife Service (Department of the Interior) has the lead agency responsibility.

The Secretary of the Interior and the Secretary of Agriculture are supportive of the State reassuming authority for subsistence management on Federal lands in Alaska. The federal agencies have been cooperating with the State in attempting to formulate a consensus solution to the current dilemma of dual management of fish and wildlife in Alaska.

The U.S. Supreme Court on May 13, 1996 denied certiorari review of the Ninth Circuit Court's ruling on "Katie John", a landmark decision concerning federal management of subsistence fishing in Alaska. Because of the Supreme Court's decision, the Ninth Circuit's ruling stands and federal management of subsistence hunting and fishing on federal public lands in Alaska will be expanded to apply to waters where the United States has reserved water rights.

An Advanced Notice of Proposed Rulemaking that identifies waters subject to subsistence priority and expansion of Federal Subsistence jurisdiction was published in the Federal Register on April 4, 1996. The proposed rule would:

1. Extend Federal Subsistence management to all selected but not yet conveyed lands within the boundaries of Conservation System Units, National Recreation Areas, National Conservation Areas, or any new national forest or forest addition, until conveyed to the State of Alaska or an Alaska Native Corporation, as required by ANILCA, and
2. Would also, when necessary, delegate to the Federal Subsistence Board the authority to regulate hunting, fishing, or trapping activities taking place off Federal public lands in Alaska if they interfere with subsistence activities on Federal public lands to such an extent as to result in a failure to provide the subsistence priority on public lands.

The FY 1997 Federal Appropriations Act for Interior and Related Agencies includes language that prevents any final rulemaking for expanded federal subsistence authority.

Planning Process Status

A cooperative planning process for fish enhancement activities has been in place since 1984. In 1993 the procedure for planning cooperative enhancement on the Tongass National Forest was updated, documented and approved by the Forest Service, the Alaska Department of Fish and Game, the Northern Southeast Regional Aquaculture Association, and the Southern Southeast Regional Aquaculture Association. The agreement identifies the process to be used by the cooperating agencies and organizations in their fisheries enhancement planning efforts. (A copy of the agreement is appended to this report.)

Hatchery Program Summary

During the past 15 years, State-owned and private nonprofit (PNP) hatcheries have contributed significantly to salmon enhancement in Southeast Alaska. There are currently 19 hatcheries in operation in Southeast Alaska (Table 2). One hatchery is owned and operated by the Alaska Department of Fish and Game (ADF&G). Four hatcheries are owned by ADF&G and operated by PNP's. One hatchery is owned by the

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City of Ketchikan and operated by the PNP Ketchikan Indian Corporation. The remaining thirteen hatcheries are owned and operated by PNP's. The Alaska Department of Fish and Game has regulatory authority over all hatcheries.

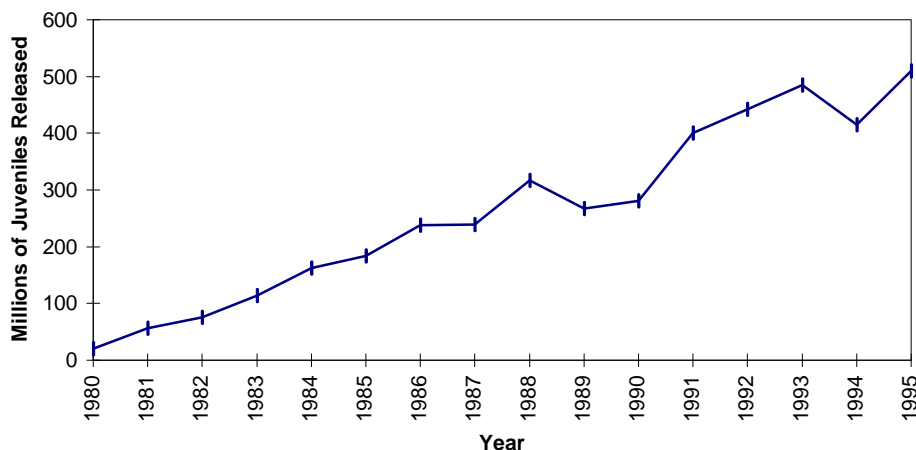
Table 2.
Number of Hatcheries in Southeast Alaska

Operator	1980	1989	1995
Alaska Dept. of Fish & Game	6	5	1
Private NonProfit Associations	6	14	18
Total	12	19	19

All of the hatcheries are managed to enhance and sustain Alaskan fisheries through the development and application of technologies in supplemental production and natural stock rehabilitation. The purpose of these hatcheries is, by State law, to make fish available to all users as part of the common property fishery. State law allows private nonprofit hatcheries to harvest a portion of hatchery returns to cover costs of operations.

Hatchery juvenile salmon releases have increased significantly since 1980 (Figure 3). Releases in 1980 totaled approximately 20 million juvenile salmon. In 1995 over 510 million juveniles were released to contribute, as adults, to the common property fishery. This increase represents a 25-fold increase over 15 years.

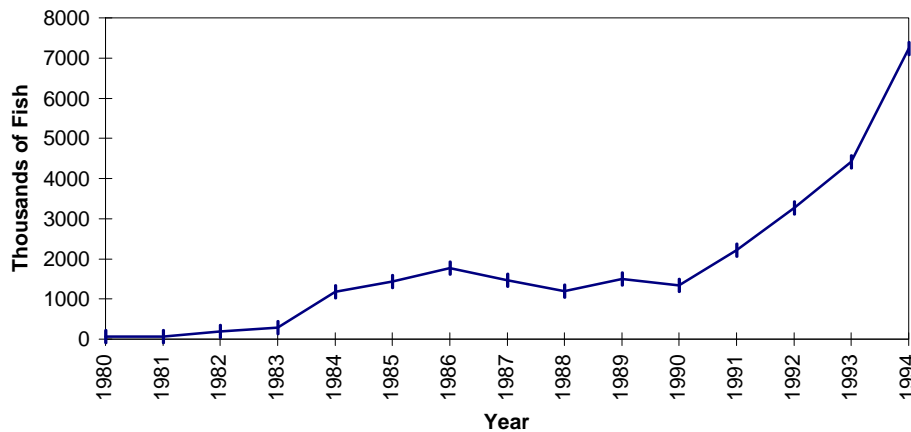
Figure 3.
Total number (in millions) of juvenile salmon released from State and private nonprofit hatcheries from 1980 through 1995.



From 1980 through 1994 the increase of juvenile salmonids released resulted in an approximate 125-fold increase in the number of hatchery planted salmon which were commercially harvested. Commercial harvest of hatchery planted salmon increased from a 1980 low of 57,000 fish to a 1994 high of 7,243,500 fish (Figure 4). Harvest numbers may fluctuate among years because of variables such as numbers of juvenile salmon released, high seas interception from foreign fishing fleets, and biological factors affecting ocean survival rates.

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Figure 4.
Annual commercial harvest of hatchery stocked salmon (1980-1994)



Many of the Forest Service cooperative habitat enhancement projects depend on the planting of juvenile salmon to seed new or rehabilitated habitats to ensure the earliest possible establishment of runs of adult salmon. Salmon eggs from wild systems are incubated in hatcheries and the resulting juveniles are transplanted back into wild systems. Without these stockings (i.e., bioenhancement) strong returns of adult salmon would be delayed for several life cycles, resulting in significant reduction in total production during the life of the project. The Commercial Fisheries Management and Development Division of ADF&G has been the lead agency responsible for bioenhancement projects on the Tongass National Forest, in close cooperation with the Forest Service.

While some may feel the potential effects of disease, genetic introgression with wild stocks, harvest interactions with nearby wild stocks, and overproduction of some species can be detrimental to the long-term sustainability of wild salmon production, the State of Alaska has strict protocols and regulations governing the siting and operation of hatcheries, including genetic evaluation of stocks, fish health at facilities, and pre-release screening.

Aquaculture (Fish Habitat Enhancement) Program

Tongass National Forest Cooperative Habitat Enhancement Activities

During the last 15 years increased emphasis has been placed on the enhancement of freshwater fish habitats on the Tongass National Forest. From 1980 to 1995 the USDA Forest Service invested approximately \$8 million (direct project costs, does not include planning, overhead, monitoring and maintenance) in the fisheries enhancement program resulting in 176 fisheries habitat enhancement projects on the Tongass National Forest (Table 3). An additional \$3.9 million was contributed by cooperators and partners in the enhancement program. At full potential production these projects are expected to contribute 17.7 million pounds of salmon annually to the harvest in Southeast Alaska. The annual value of this potential harvest is estimated to be \$10,674,000. Return on investment averages about 6:1 for the overall fish habitat enhancement program on the Tongass.

The majority of the fish habitat enhancement projects implemented on the Tongass National Forest are cooperative projects involving multiple agencies and organizations. The costs of the projects are shared in a variety of ways which vary project by project depending on budget levels and priorities, availability of personnel and equipment, fish brood stock availability at hatcheries, and proximity of other projects to the proposed project location. Coordination and commitment is necessary at all levels of all agencies and organizations participating in the projects to ensure success of the projects and contribute to the continued production and health of the salmon stocks in Southeast Alaska.

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Monitoring

The anticipated salmon production from fish habitat enhancement projects on the Tongass National Forest is calculated based on site-specific habitat conditions and an analysis of limiting factors for salmon production. The test for these calculated habitat production estimates consists of monitoring conducted on individual projects and the subsequent feedback of the monitoring results into the project planning process.

Table 3.
Tongass National Forest Cooperative Fisheries Enhancement Projects Completed During 1980-95

Enhancement Activity	Number of Projects	Estimated Production of Fish (M Lbs./year)	Estimated Commercial Value (M \$/year)	Cost Federal (M \$)	Cost Partners (M \$)
Fishways	42	6,749.1	2,896.1	4,403.3	210.3
Falls Modification	13	166.9	126.3	167.4	4.0
Spawning Channels	9	450.5	238.6	374.0	111.5
Debris Removal	10	76.0	46.4	19.0	0.0
Lake Fertilization	9	7,306.6	5,605.1	1,456.2	1,938.0
Lake Stocking	8	1,242.0	757.6	521.1	1,170.3
Stream Stocking	22	519.1	368.1	168.6	236.6
Rearing Ponds	18	17.1	10.6	87.6	1.7
Incubation Boxes	5	1,091.9	572.7	67.0	131.2
LWD Management	28	83.6	52.8	633.6	30.0
Fish Weir	12	NA	NA	21.0	120.0
TOTAL	176	17,702.2	10,674.3	7,918.8	3,953.6

Notes: Project totals represent the number of activities completed at different locations. Repetitive annual investments at the same site (that is, fertilizer applied to each lake annually) are not shown, although the costs of the repetitive treatments have been included in the cost totals.

Estimated production of fish is based on full utilization of habitat capability. The time it will take to reach full production varies with the species, application of bioenhancement techniques and fisheries management strategies regulating the fish stocks returning to the projects. Total production is calculated to represent the fish available for subsistence, sport and commercial harvest.

Values displayed are minimum estimates of the value of the fish produced by enhancement activities. The dollar value of any given fish is generally greater when harvested in a sport or subsistence fishery than when harvested in a commercial fishery. Value per pound of fish is the average price paid to the commercial fisher over a 15 year period, expressed in 1991 dollars. Subsistence and Sport values are not shown.

Costs shown in the table are direct project costs (i.e., construction) and do not include indirect costs such as program planning.

The cost column for partners includes the combined investments of the Alaska Department of Fish and Game and Regional Aquaculture Associations. Individual cooperative investment information for the majority of the projects involving these organizations were not available.

Monitoring fish production performance of enhanced fish habitat has occurred for each type of habitat enhancement activity. Generally, most projects that are included in the activities listed in Table 3 receive a qualitative level of monitoring to ensure that the project is operating as designed. Additional monitoring is conducted on fishway, lake fertilization and stocking projects to more accurately determine fish production. A few representative projects are quantitatively monitored to test the production estimates used during the planning and design phases of project development. This monitoring generally requires the greatest investment in time and dollars and usually involves intensive enumeration and tagging of immature salmon. Most fisheries managers believe a greater emphasis should be placed on intensive types of monitoring, to more accurately determine the actual contribution that each type of enhancement activity makes to the total harvest.

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Tongass National Forest Enhancement Activity

Small Instream Structures (large woody debris (LWD), gabions, etc.)

Small structures are sometimes constructed in stream channels to improve rearing habitat for salmon. Juvenile coho, chinook and sockeye salmon and steelhead trout usually require 1-4 years of rearing in freshwater before migrating to saltwater where they mature. Instream structures, often constructed of logs or rock, provide cover to protect fish from predators, increase water depth during summer and winter low flow periods, and shelter from high stream flows. This helps salmon and steelhead fry and parr to survive better and increase the numbers of juveniles migrating to the ocean.

Although individual structures can be low in cost, large numbers of structures may be needed to significantly change the habitat. Structures have a design life ranging from 5 to 25 years; the benefit/cost ratios range from 2:1 to 10:1.

Fishways

Fishway structures are constructed at stream barriers to allow salmon and trout passage to upstream spawning and rearing habitat. There have been more fishways constructed than any other type of project. Barriers can be partial, with some adult salmonids passing during specific water flows, or the barriers may be total, blocking salmon migration at all water flows. The exact number of barriers on streams throughout the Tongass National Forest is unknown. However, fisheries habitat managers believe there could be more than a thousand unidentified barriers on streams on the Tongass National Forest. As barriers are identified, analyses are conducted on a site-specific basis to determine feasibility and cost effectiveness of fishway construction and any potential negative effects to fish already resident in the stream. Many barriers have been identified on streams that have too little available habitat upstream to justify investment in a fishway structure.

The fishway construction program has been very successful. Most fishways built since 1980 have survived high flow periods and pass fish as designed. (Some fishways have required modifications following initial construction to ensure fish passage.) Periodic maintenance is required to remove debris from the ladders and jump pools. Most fishways are constructed with an average design life of 25 years. Fishways are generally expensive to construct but can have benefit/cost ratios as high as 13:1 when favorable salmon and steelhead trout spawning and rearing habitats exist above the barrier.

Bioenhancement is sometimes associated with fishway construction. Salmon eggs taken from below the barrier or from nearby streams are incubated in hatcheries, with the resulting juvenile fish released in the stream and or lake habitat above the newly constructed fishway. Bioenhancement ensures earlier establishment of runs of adult spawners.

Barrier Modification

Falls modification is the means by which either a partial or total barrier to salmon migration is altered to enhance fish passage. This is usually accomplished by creating small pools in the falls or high velocity chutes. These pools are either created in the natural bedrock or may be created by the construction of low concrete walls. Monitoring of salmon passage under various flow conditions is often needed to determine if the falls modification has been successful or if further modification is needed.

Barrier modification projects have a high rate of success and are moderate in cost. Benefit/cost ratios have been as high as 12:1. Bioenhancement is sometimes required to ensure early establishment of runs of adult spawners.

Spawning Channels

Spawning channels are constructed to provide stable spawning and rearing habitat for salmon. The most common strategy employed in Southeast Alaska is the excavation of a channel adjacent to a stream such that the channel provides fish access to the main stream. Intercepted ground water, in areas of upwelling, provides flowing water for the constructed spawning channels. Spawning channels can be low cost projects with benefit/cost ratios as high as 8:1.

Spawning channels may receive bioenhancement in the form of adult salmon transfers into the channel. Blocking the spawning channel connection to the mainstream usually results in the transferred salmon spawning in the channel.

Spawning channel construction is a relatively new salmon enhancement technique on the Tongass National Forest. Early results indicate that spawning channels can be a very cost effective method to produce salmon in Southeast Alaska. The major limitation to the construction of spawning channels is the need for ground water interception.

Rearing Ponds/Off-channel Rearing

Rearing ponds can provide increased quantity and often quality of rearing habitat for juvenile salmon over natural stream systems. Ponds are constructed near a stream system and connected to the stream by ditches or channels. Juvenile salmon rearing in the stream move into the more favorable pond habitat.

Costs of rearing-pond construction varies considerably. Some ponds are constructed during road gravel excavation projects, while other ponds are constructed solely for the purpose of rearing salmon. Rearing-ponds are moderate in cost with an average benefit/cost ratio of 4:1.

Rearing ponds appear to be a cost effective means of successfully increasing the size and number of juvenile coho salmon produced. Rearing-ponds require continued monitoring with more emphases placed on quantitative monitoring techniques to more accurately determine the contribution of pond reared salmon to the common property fishery.

Barren Lake Stocking

An exception to the establishment of self-perpetuating wild runs of salmon by bioenhancement has been the practice of "barren" lake stocking. Barren lake stocking consists of planting immature salmon in lakes that do not have natural runs of salmon because of barriers. The stocked juvenile salmon rear in the lakes until emigrating to saltwater where they mature. Total harvest of these salmon is targeted since natural reproduction is not possible. Generally the barriers do not prevent the outmigration of salmon smolts. Survival of juvenile salmon in lakes can be as high as 65 percent or as low as 1 percent depending on the lake, species released in the lake, and disease associated with the species and the lake.

Cooperative Fish Stocking

Stocking of lakes and streams has been accomplished generally for the purpose of bioenhancement of other enhancement projects. As previously discussed, bioenhancement seeds new habitat with young salmon with the objective of establishing self-perpetuating wild runs of salmon.

Incubation Boxes

Incubation boxes are used in remote locations to incubate Chum salmon eggs. These devices are similar to incubation systems used in fish hatcheries but operate with little maintenance. Unlike incubation systems in hatcheries, salmon fry swim out of the boxes and into a stream or lake ecosystem. Use of incubation boxes increases the survival of eggs to fry over survival commonly observed in stream gravels.

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Incubation boxes can be moderately expensive projects. However, survival of salmon eggs to fry is about 70 percent and maximum production has been measured at 98 percent. Benefit/cost ratios can be as high as 20:1.

Lake Fertilization

Some lakes exhibiting low levels of fertility and high potential for salmon production are enriched using commercial fertilizers. The objective of lake fertilization is to enhance primary food production and to increase the size and survival of salmon fry. By enriching the nutrient level of these lakes there is a measurable increase in the number and/or size of outmigrating juvenile salmon, resulting in increased numbers of adult salmon available for harvest. Some lakes become self fertilizing with large increases in adult escapement, where returning adults bring nutrients from the sea. Lake fertilization is a relatively expensive enhancement technique requiring detailed pre- and post-fertilization monitoring. However, large increases in salmon production are often realized. Benefit/cost ratios can be as high as 4:1. Bioenhancement (stocking of salmon fry) is often conducted in association with lake fertilization.

Debris Removal

Debris removal is a habitat enhancement technique utilized extensively during the 1970's on the Tongass National Forest. Natural debris deposited in stream channels was thought to create barriers to upstream migration of adult salmon and to reduce available spawning habitat. Extensive stream cleaning was conducted to remove the debris. Unfortunately, debris removal was conducted in excess and much beneficial large woody debris (structure) was removed from some stream channels. This work was well intentioned and considered to have positive benefits for pink and chum salmon, the young of which leave the stream ecosystem immediately upon emerging from the gravel substrate. Salmon species requiring instream rearing habitat during the early portion of their life cycles probably declined in numbers as a result of debris removal practices. Studies have recently shown that large woody debris adds diversity to stream ecosystems and in most instances is beneficial to the production of salmon in those systems. Debris removal projects are currently conducted under the careful supervision of fisheries managers.

Debris removal is labor intensive and generally exhibits a low benefit/cost ratio. Some notable exceptions do exist in which very high benefits resulted from debris removal. In two instances, accumulations of debris at the outlets of lakes blocked migration into the lake and the associated habitat in the streams above the lake. Removal of the blockage resulted in large numbers of salmon reaching the high quality habitat in the lake and further up the watershed. Benefit/cost ratios, in these exceptions, are calculated to be as high as 100:1.

Weir / Stock Assessment

This activity evaluates the success of previously completed projects by establishing the common property harvest of fish produced by completed projects. In addition this activity can support fisheries subsistence management and develop trend information of escapement and production of indicator streams.

Riparian Rehabilitation

This is a relatively new technique that has been used over the past two years. Benefit to cost ratios have not been calculated for this activity. The overall objective of this work is to accelerate the return of logged riparian zones to preharvest conditions. Most of the current emphasis has been to accelerate growth of large conifers for future sources of large woody debris. Care is being taken to maintain a species mix to include deciduous trees mostly next to the stream bank. Most work involves thinning alder to release conifers. Some future work may include microsite development, planting of conifers, and road treatments.

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Future Fisheries Habitat Enhancement Opportunities

There are 158 potential projects identified for implementation during the next ten years on the Tongass National Forest (Table 4). Most of the potential projects have not been through environmental analyses nor on-site review required to determine project feasibility. Total costs, including project planning and implementation, maintenance and monitoring of these projects, are estimated to be \$30.7 million.

Table 4.
Number of Potential Enhancement Projects by Type

Project Type	Ketchikan Area	Stikine Area	Chatham Area	Total
	single yr/multi yr	single yr/multi yr	single yr/multi yr	
Small Instream Structures	7 / 4	5 / 0	10 / 5	31
Fishways	5 / 0	11 / 0	8 / 2	26
Barrier Modification	5 / 2	2 / 1	4 / 0	14
Spawning Channels	1 / 0	0 / 0	1 / 0	2
Rearing Ponds/off channel rearing	0 / 0	0 / 0	3 / 0	3
Barren Lake Stocking	0 / 3	1 / 0	0 / 1	5
Cooperative Fish Stocking	1 / 3	0 / 3	1 / 3	11
Incubation Boxes	0	0 / 2	2 / 1	5
Lake Fertilization	0 / 2	0 / 0	0 / 3	5
Debris Removal	0	0	0	0
Weir/stock assessment	0 / 2	0 / 6	7 / 2	17
Riparian Rehabilitation	4 / 6	4 / 1	22 / 2	39
Total Projects	45	36	77	158

Notes: Multi-year projects are usually implemented in successive years but only counted as one activity. Fertilization of a particular lake is an example of a single project which may be repeated for several years in order to achieve the desired objective of restoring a natural run of salmon to the lake.

The majority of the small instream structural projects, including projects such as large woody debris and gabion placement, mitigate past logging activities. These projects may be considered as rehabilitation rather than enhancement.

All projects which are determined to be feasible following environmental analysis and on-site review may be scheduled for implementation. Priorities for project completion are coordinated through the cooperative salmon enhancement planning process (see appendix to this report). The final implementation schedule will be dependent upon a variety of factors including budget availability, cost/benefit ratios and partnership opportunities. An additional factor for consideration is the timing and location of other forest management activities. Some activities, such as road construction for timber harvest purposes, are important for the successful implementation of some fisheries projects.

Implementation of all potential fisheries enhancement projects on the Tongass during the next decade is estimated to total 864.7 million pounds of salmon through the first five decades. Fish would be available to subsistence, sport and commercial harvesters. The aggregated value of this harvest is projected to be \$661.1 million during this same period.

Recommendations for Legislative Action

Current laws and regulations adequately provide for the program summarized in this report. Appropriations for the anadromous fish program on the Tongass should be funded at \$5 million per year to complete the potential fish projects and to monitor, maintain and evaluate completed projects.

**TONGASS NATIONAL FOREST
COOPERATIVE FISHERIES ENHANCEMENT
PLANNING PROCESS**

1993 Revision

Tongass National Forest Cooperative Fisheries Enhancement Planning Process

I. Introduction

Tongass National Forest Cooperative Fisheries Enhancement Planning is a process designed to effectively and efficiently coordinate fish enhancement activities and goals between interested groups in Southeast Alaska. The process describes how the Forest Service, Alaska Department of Fish and Game (ADF&G), and Southeast Alaska Regional Aquaculture Associations cooperate in the planning, funding, and implementation of fisheries rehabilitation and enhancement projects. Not only does the process address activities on the Tongass National Forest, but it also should facilitate the development of fisheries opportunities in watersheds with other land managers and owners.

The foundation for Cooperative Planning is in both Federal and State law. The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 (Public Law 96-487) and Alaska Statutes 16.10.375 and 16.10.380 require coordination between public and private sectors (see glossary for definitions.) However, it is primarily ANILCA, Section 507(a), to which this Cooperative Planning process responds. Section 507(a) states:

SEC. 507. (a) The Secretary of Agriculture is directed to implement a cooperative planning process for the enhancement of fisheries resources through fish hatchery and aquaculture facilities and activities in the Tongass National Forest. Participation in this process shall include, but not be limited to, the State of Alaska and appropriate non-profit aquaculture corporations. The Secretary may contract with private, non-profit associations for services in such planning.

In addition to the cooperative planning required by 507(a), Alaska Statute 16.10.375 establishes the requirement for Regional Salmon Plans. Regional Planning Teams (RPT's), made up of representatives of Regional Aquaculture Associations and ADF&G personnel, develop the Regional Salmon Plans.

Integration of the Federal and State requirements, for the Tongass National Forest, is accomplished through this Tongass National Forest Cooperative Fisheries Enhancement Planning process. The intent of the planning process is to develop and describe a process which will efficiently coordinate activities between the Forest Service, ADF&G, and the Regional Aquaculture Associations and others, where appropriate, to meet common fish enhancement and production objectives. This planning process primarily applies to salmon species but may also include discussion of other species of fish.

Production objectives are generally set in the Regional Salmon Plans (Northern and Southern Southeast Plans, and the Yakutat Plan) in the form of targets and goals for fish production. The Tongass National Forest Land Management Plan (TLMP) sets the specific objectives for the Forest based on the Regional Salmon Plans.

Enhancement opportunities that are addressed in the Salmon Plans or in the Tongass Land Management Plan include fish hatcheries, and other fisheries resource rehabilitation and enhancement activities. Specific types of projects include, but are not limited to fishways, fish weirs, spawning channels, fish stocking, and lake fertilization. Recreational, subsistence, and commercial fisheries should all be addressed when planning projects.

Cooperative implementation of fisheries rehabilitation and enhancement programs on the Tongass National Forest has been ongoing and is addressed in this cooperative agreement, and the Memoranda of Understanding between the ADF&G, the Regional Aquaculture Associations, and the USDA Forest Service (Appendix 1).

Evaluation reports (ANILCA Section 507(b)), prepared at the time of each Tongass Land Management Plan revision, shall be compiled by the Forest Service with the assistance and review of the ADF&G and the Regional Aquaculture Associations. The reports summarize projects completed during the previous forest planning period and report on the status of cooperative fisheries planning. A listing of projects proposed for the next forest planning period is included in the report.

II. The Planning Process

The Tongass National Forest Cooperative Fisheries Planning Process (Figure 1) is the orderly identification, verification, approval, implementation, and evaluation of rehabilitation and enhancement projects. The process is composed of sequentially integrated components and encompasses both the regional salmon planning and forest planning processes. A description of each process component is presented below.

A. The Tongass Land Management Plan (TLMP)

The TLMP is the source of management direction for the Tongass National Forest, specifying activity objectives for a period of 10-15 years. As the TLMP is revised, new management direction in the plan is based on the need to change management direction identified in the previous plan. Issues drive the plan's development, amendment, or revision.

The TLMP is a "programmatic" plan in that it sets the strategic goals for the Forest for all resources, and does not evaluate the environmental consequences of individual on-the-ground activities. For fisheries, the plan integrates public issues, the results of monitoring during the previous planning period, requirements of law, and the recommendations of the Comprehensive Salmon Plans. Targets and goals set by the Comprehensive Salmon Plans are used to establish the demand for fish resources through the next 10-15 year Forest planning period. The Forest Plan presents a recommended strategic level of fish enhancement for the Tongass National Forest. A preliminary list of projects which could be implemented during the 10-15 year planning period may be proposed.

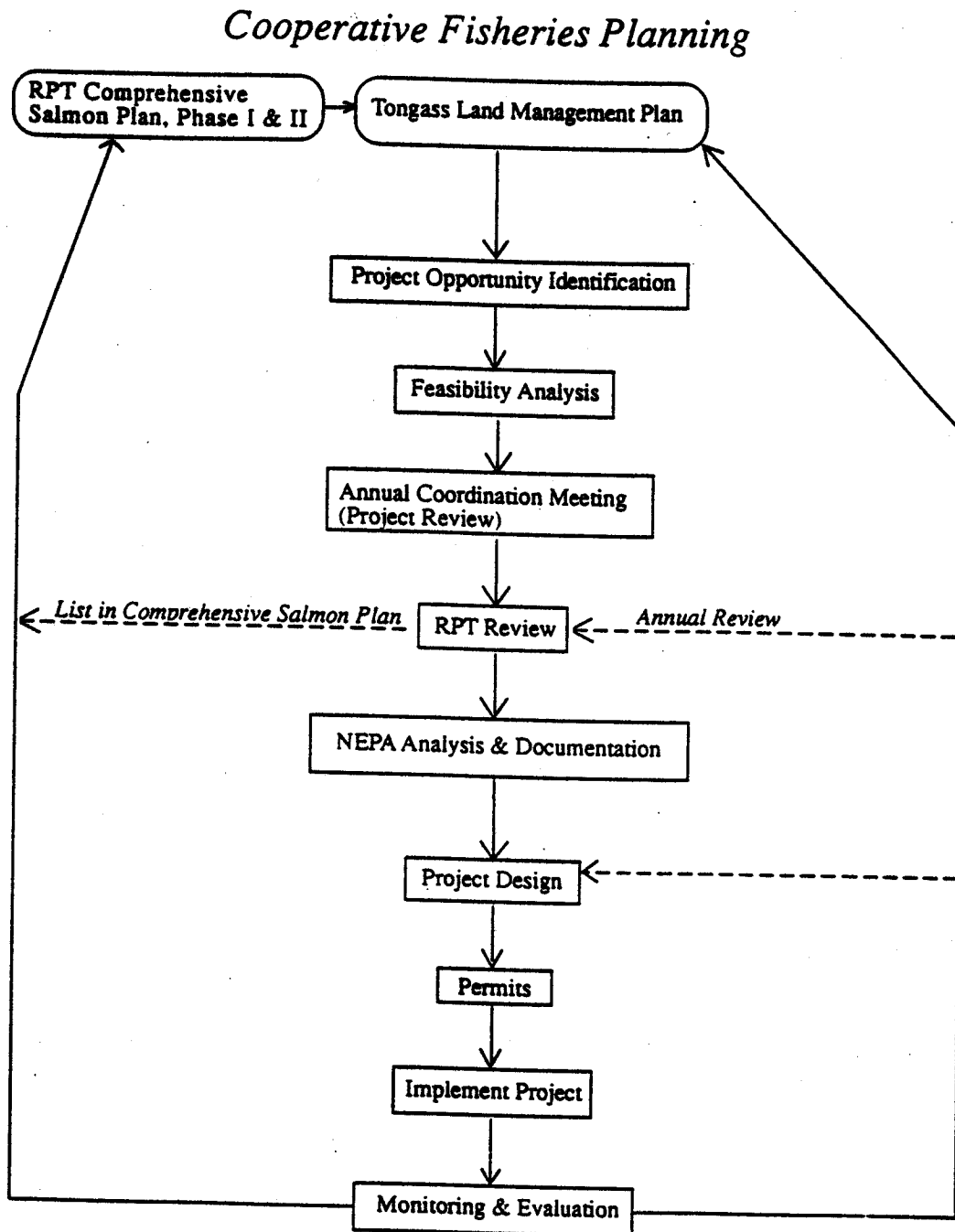


Figure 1. Tongass National Forest Cooperative Fisheries Enhancement Planning flow diagram

B. Project Opportunity Identification

Fisheries enhancement opportunities are identified by participants in the planning process, or by others with enhancement ideas or proposals. Documentation of these opportunities is on the Fisheries Project Opportunity Identification Form (Appendix 2). Upon completion of the first page and the top of the second page of the forms, copies are sent for review to the people or agencies identified by the project proponent on the second page of the form. This review is the basis of the next step, the feasibility analysis.

C. Feasibility Analysis

A feasibility study, usually prepared by the project proponent will determine if there are any obvious overriding factors that would preclude potential project development. Feasibility studies can be cooperatively developed between groups, agencies or individuals. The following areas should be examined:

- Can the project be physically accomplished?
- Are there any significant biological problems?
- Are there social or political considerations?
- Is the project economically feasible?
- Is the project compatible with the TLMP, Forest Service policy, and other agency and organization plans or policies?
- What is the land status/classification of the project area? (For example, is it in a special use authorization area, are there rights-of-way, is the land encumbered or restricted, or is the land designated as wilderness?)
- What are the potential benefits to user groups, and the potential conflicts between user groups?

Considerable feasibility information can be obtained through formal and informal contact with individuals or groups. Level of support for a project can often be determined in advance through these contacts.

Only projects determined to be feasible by the proponent will be further addressed in the Cooperative Fisheries Planning Process for the Tongass National Forest. Projects may become part of the preliminary list of projects incorporated into the Tongass Land Management Plan, its revision or amendments.

D. Annual Coordination Meeting

One annual coordination meeting should be held for each of the Tongass Administrative Areas. Representatives from the ADF&G's Fisheries Divisions and other Divisions, as appropriate, Area/District representatives of the Forest Service, and the appropriate aquaculture association will conduct an annual Cooperative Fisheries Coordination meeting. The primary purpose of this meeting will be to review and coordinate identified projects in Southeast Alaska. Agenda topics should include, but not be limited to:

- Discussion of identified project opportunities and feasibility analyses, circulated since the group last met.
- Review of all projects currently in development. Discussion should be guided by the project proponent or leader.
- Presentation of anticipated budgets.
- Coordination of project implementation.
- Opportunities for cooperative funding.
- Results of previously completed projects.

Project opportunities generally agreed upon by the participants at the Cooperative Fisheries Coordination meetings will be forwarded by the proponent to the Regional Planning Teams for review.

E. Regional Salmon Planning

Potential projects endorsed at the annual Cooperative Fisheries Coordination meetings will be presented to the Regional Planning Teams (RPT's) at their regularly scheduled meetings. RPT's, established under Alaska Statute 16.10.375, are responsible for the development and amendment of a Comprehensive Salmon Plan, including provisions for both public and private nonprofit hatchery systems. Representation on the RPT consists of one person from each of the three fisheries divisions of the ADF&G, and three members from the appropriate qualified regional aquaculture association.

The RPT's also include ex-officio members, as considered necessary by individual RPT's. The Forest Service has ex-officio representation on each of the Southeast Alaska RPT's. Ex-officio representation for subsistence and sport fisheries is encouraged by the RPT members.

State statutes define certain duties of the RPT's, including:

- Regional Salmon Plan development and amendment.
- Review of private non-profit (PNP) hatchery permit applications and recommendations to the Commissioner of the ADF&G.
- Review and comment on proposed permit suspensions or revocations by the Commissioner of ADF&G.

As part of the cooperative fisheries planning process under #1 above, the RPT's annually review new projects proposed by the Forest Service, ADF&G, Aquaculture Associations, and other project proponents. Project proposals that are reviewed and endorsed by the RPT's are included in the annual updates of the Comprehensive Salmon Plans.

F. NEPA Analysis and Documentation

Following review and positive recommendation by the RPT, the Forest Service or other lead agency undertakes environmental analysis of the project and appropriate documentation of the analysis, as required by the National Environmental Policy Act (NEPA). Four basic steps are required: scoping, which determines the public issues concerning the proposed project; alternative development, which must consider a number of alternatives to the proposed action, including the possibility of no action; the determination of the environmental consequences of the alternatives; and, selection of the preferred alternative and the identification of the reasons for that selection. Concerns of the RPT from the previous step (step E), including project monitoring and evaluation criteria, are addressed. All steps must be documented, although the documentation required varies based on the scope of the project. Final project design, the next step, is based on the selected alternative.

G. Project Design

Following selection of an alternative final project design may proceed. On National Forest System lands, approval of project designs needing detailed engineering, such as fish pass and spawning channel construction, is required by the Forest Service Regional Office, Director of Engineering. All other enhancement project designs to be implemented on National Forest System lands require the approval of the appropriate Forest Service Line Officer.

H. Permits

The nature of the project proposal will determine the types of permits required. The Alaska Coastal Zone Management Program, administered by the State of Alaska, Division of Governmental Coordination, has a system for reviewing and processing all resource-related required approvals (permits, leases, and other authorizations) which are required for proposed projects in or affecting coastal areas of Alaska. This system is called Project Consistency Review. Project proposals are reviewed to:

- Identify permits required by the State resource agencies, including the Alaska Departments of Environmental Conservation (DEC), ADF&G, and Department of Natural Resources (DNR).
- Identify permits required by Federal agencies, such as the Army Corps of Engineers and the Environmental Protection Agency.
- Determine whether the project is consistent, to the maximum extent practicable, with the standards of the Alaska Coastal Management Program and approved district coastal management programs.

Participants in the State's review include the applicant, state resource agencies and the Division of Governmental Coordination, the affected local coastal community, and other interested members of the public. The coordinating agency must complete the review of the proposed project within either 30 or 50 days. A 30-day review schedule will be used if all associated state permits must, by statute or regulation, be issued in 30 days. A 50-day review schedule will be used for projects with approvals requiring 30-day public notice.

For private non-profit (PNP) hatchery projects, including expansion of facilities for additional production of fish or changes to production scenarios, permit alteration requests are required. These requests are reviewed by the appropriate Regional Planning Team (RPT) prior to approval by the Commissioner of the ADF&G. If these permit alterations will require any other permits, the PNP operators are required to fill out a coastal zone questionnaire. Depending on the nature of the project, a permit from the U.S. Army Corps of Engineers, a Title 16 permit issued by the ADF&G Habitat Division, or a special use authorization from the Forest Service may also be required.

I. Implementing the Project

Following receipt of the appropriate permits the project may be implemented. Emphases is placed on cooperative funding and/or implementation of projects, as discussed at the Annual Coordination meeting (Step D).

J. Monitoring and Evaluation

The performance of enhancement projects should be measured and evaluated to demonstrate achievement of the desired objectives. The nature of the project will determine the degree of monitoring required. Projects that may significantly affect or impact wild stock or alter allocations among user groups will have a comprehensive evaluation and monitoring plan developed, reviewed, and approved by the parties. Cooperative funding is also emphasized for monitoring and evaluation activities.

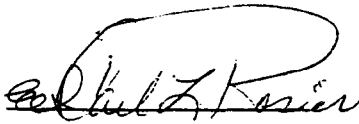
The monitoring plan developed for a project must include specific reporting and termination dates, and identify specific data needs. Monitoring actions include:

- Implementation of the approved monitoring plan.
- Evaluation of accomplishment and outputs.
- Preparation and distribution of periodic evaluation and performance reports as described in the monitoring plan.
- Storage of monitoring reports for future reference.

If many similar projects are implemented, only a representative sample need be monitored. Low cost, low risk projects often need only cursory monitoring, while high cost, high risk projects, and projects involving new technologies may need more intensive monitoring.

Monitoring results are used to help in the formulation of future plans, such as the Comprehensive Salmon Plans, the Tongass Land Management Plan, and individual project plans.

Cooperative Fisheries Planning Status Report



CARL L. ROSIER

Commissioner

Alaska Department of
Fish and Game

Date: 8/5/93



PETER A. ESQUIRO

General Manager

Northern Southeast Regional
Aquaculture Association

Date: 7/2/93

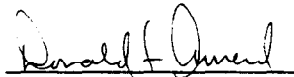


MICHAEL A. BARTON

Regional Forester

United States
Department of Agriculture
Forest Service

Date: 6/25/93



DONALD F. AMEND

General Manager

Southern Southeast Regional
Aquaculture Association

Date: 7/7/93

III. Appendixes

1. Memoranda of Understanding between the Alaska Department of Fish and Game, the Regional Aquaculture Associations, and the USDA Forest Service
2. Fisheries Project Opportunity Identification Form

Appendix 1

MEMORANDUM OF UNDERSTANDING
Between
ALASKA DEPARTMENT OF FISH AND GAME
and
U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE
and
PRINCE WILLIAM SOUND AQUACULTURE CORPORATION,
AND COOK INLET, NORTHERN SOUTHEAST REGIONAL,
AND SOUTHERN SOUTHEAST REGIONAL
AQUACULTURE ASSOCIATIONS

This MEMORANDUM, effective as of the 26 day of October, 1981, between the Alaska Department of Fish and Game (hereafter referred to as the Department), the U.S. Department of Agriculture, Forest Service (hereafter referred to as the Forest Service), and the Cook Inlet, Prince William Sound, Northern Southeast Regional and Southern Southeast Regional Aquaculture Associations (hereafter referred to as the Associations).

WITNESSETH:

WHEREAS: The Department has been created under the laws of the State of Alaska to manage, protect, maintain, improve, and extend the fish and wildlife resources of the State of Alaska; and

WHEREAS: The Forest Service is responsible for the fish and wildlife habitat on National Forest lands and some of the fish habitat rehabilitation, enhancement, and development activities of both the Department and the Associations will be carried out on lands under the management jurisdiction of the Forest Service; and

WHEREAS: The qualified Associations have been created under the laws of the State of Alaska for the purpose of enhancing salmon production; and

WHEREAS: It is the mutual desire of the Department, Forest Service, and Associations to work in harmony for the common purpose of enhancing and maintaining the salmon resources of the State in the best interest of the people of Alaska; and

WHEREAS: The public benefits of cooperation between agencies engaged in similar activities in given geographical areas are obvious; and

WHEREAS: The expenditure of money and use of manpower and equipment for the enhancement, rehabilitation, and maintenance of salmon resources by related agencies demands careful coordination; and

WHEREAS: The parties to this Memorandum of Understanding are engaged in salmon enhancement programs and desire to develop a cooperative relationship which will be in the best interest of all parties and produce the greatest public benefit."

A. NOW, THEREFORE, THE DEPARTMENT AGREES:

1. To enhance, rehabilitate, maintain, and regulate salmon populations originating from within the respective geographic areas of the four Associations.
2. To recognize the Forest Service as the agency responsible for fish and wildlife habitat on the National Forests of Alaska.
3. To cooperate with the Forest Service and Associations in the way of mutually funded projects and/or personnel assistance whenever possible.
4. To make available to the Forest Service and Associations technical expertise in the fields of fisheries and engineering as requested whenever possible.
5. To develop strategic salmon enhancement plans through the Regional Planning Team process.
6. To cooperate with the Forest Service and Associations in project planning and development within the limitations of funds and manpower available for that purpose.
7. To make or sanction no introduction of any native or exotic salmon species without an investigation of its effect on other resources and its desirability as a management measure.
8. To provide the Forest Service and Associations with available salmon project evaluation reports and cost analysis when requested.
9. To make available to the Forest Service and Associations plans for salmon stock and habitat rehabilitation, enhancement, and development in advance of execution of the projects.

B. THE FOREST SERVICE AGREES:

1. To recognize the Department as the agency responsible for the management of the fish and wildlife resources of the State of Alaska.
2. To utilize the Regional Planning Team process for the development of strategic salmon enhancement and rehabilitation plans.
3. To cooperate with the Department and Associations in the way of mutually funded projects and/or personnel assistance whenever possible.
4. To make available to the Department and Associations reports of habitat reconnaissance and evaluation of habitat enhancement projects and any other pertinent reports when requested.

Cooperative Fisheries Planning Status Report

C. THE ASSOCIATIONS AGREE:

1. To recognize the Department as the agency responsible for the management of the fish and wildlife resources of the State of Alaska.
2. To recognize the Forest Service as the agency responsible for fish and wildlife habitat on the National Forests of Alaska.
3. To cooperate with the Department and Forest Service in the development mutually funded projects and/or personnel assistance whenever possible.
4. To cooperate with the Department and Forest Service in the development of salmon habitat improvements within the limitations of funds available for that purpose.
5. To obtain appropriate approval needed from the Department for all salmon enhancement and rehabilitation projects in accordance with Alaska Statute Title 16 authority invested in the Department.
6. To obtain appropriate approval needed from the Forest Service for all salmon enhancement and rehabilitation projects according to procedures, rules, and regulations of the Forest Service regarding structures, roads, etc. with special emphasis on projects within National Monuments, Wilderness Areas, and other lands of special significance.
7. To provide the Department and Forest Service with project evaluation and other pertinent reports when requested, and as required by law or policy.

D. THE DEPARTMENT, FOREST SERVICE, AND ASSOCIATIONS MUTUALLY AGREE:

1. To cooperate, consistent with respective statutory and regulatory responsibilities, in the enhancement, rehabilitation, and maintenance of the salmon resource.
2. To cooperate in the development and application of plans and projects for the enhancement, rehabilitation, and maintenance of salmon and their habitat in a manner which mutually supports the goals and objectives of the three organizations.
3. To recognize the purposes for which Wilderness areas were established, to design facilities within Wilderness so as to minimize impact on Wilderness values and to plan aquaculture projects so that those involving structures or changes in gene pools are implemented outside of Wilderness areas to the extent that suitable opportunities are available and economically feasible.
4. To exchange technical information, and furnish assistance to each other in the form of materials, personnel, equipment, vessels, and aircraft within legal limits of each organization.

ALASKA DEPARTMENT OF FISH AND GAME

Date 10-26-81

By Dore W. Callensworth
Title Deputy Commissioner

UNITED STATES DEPARTMENT OF AGRICULTURE,
FOREST SERVICE

Date 9/28/81

By Michael A. Briston
Title Deo Regional Forester

PRINCE WILLIAM SOUND AQUACULTURE CORPORATION

Date Sept. 9, 1981

By William F. Kellum
Title President

COOK INLET AQUACULTURE ASSOCIATION

Date Sept 9, 1981

By Floyd Heimbeck
Title Exec. Dir.

NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION

Date September 9, 1981

By Arthur P. Eganis
Title General Manager

SOUTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION

Date September 9, 1981

By Ronald W. W. W. W.
Title Executive Director

Cooperative Fisheries Planning Status Report

Appendix 2

Date: _____
Proponent: _____
Organization: _____

FISHERIES PROJECT OPPORTUNITY IDENTIFICATION FORM

Project Name: _____ Type of Project: _____
Describe Location: _____
ADF&G Stream No: _____
Access to the Site: _____

Attach Map of Project Location:

Briefly describe the opportunity including the purpose, benefiting species, potential user groups, and projected amount and type of habitat to be improved. Attach schematics maps/photos of proposed project, if appropriate; Describe relationship to any of the projects. _____

Land Ownership, Status, and Classification: _____

Habitat surveys and watershed condition surveys presently available (list):

Available data on indigenous species and stock status: _____

Comments

Specialists in the following disciplines and/or representatives of the indicated organizations should review and comment on the proposed projects.

Alaska Department of Fish and Game

- ☐ Commercial Fish Division
- ☐ FRED Division
- ☐ Habitat Division
- ☐ Sport Fish Division
- ☐ Subsistence Division

(appropriate) Aquaculture Association

- ☐ Northern Southeast
- ☐ Southern Southeast

USDA Forest Service

- ☐ Ecology
- ☐ Archeology
- ☐ Fish
- ☐ Geology
- ☐ Hydrology
- ☐ Recreation
- ☐ Soils
- ☐ Subsistence
- ☐ Timber
- ☐ Wilderness
- ☐ Wildlife
- ☐ Forest Service District Office
if not initiator of the project

Comments:

INSTRUCTIONS (DRAFT)

1. Proponent fills out first pages and identifies reviewers on second page. Proponents should coordinate with the Forest Service, Alaska Department of Fish and Game, and the Aquaculture Associations, as appropriate to identify the reviewers.
2. Proponent sends copies of both pages to the reviewers with a request for their initial thoughts on the project.
3. Reviewer returns comments(written on page 2) to the proponent listed on the top of page 1.
4. Proponent uses comments for the project feasibility analysis and makes all comments available to reviewers, if requested.

GLOSSARY

Alaska Statute 16.10.375. Regional Salmon Plan

The commissioner shall designate regions of the State for the purpose of salmon production and have developed and amend as necessary a comprehensive salmon plan for each region, including provisions for both public and private non-profit hatchery systems. Subject to plan approval by the commissioner of ADF&G, comprehensive salmon plans shall be developed by regional planning teams consisting of department personnel and representatives of the appropriate qualified regional associations.

Alaska Statute 16.10.380. Regional Associations

(a) The commissioner shall assist in and encourage the formation of qualified regional associations for the purpose of enhancing salmon production. A regional association is qualified if the commissioner determines that:

- (1) it is comprised of associations representative of commercial fishermen in the region;
- (2) it includes representatives of other user groups interested in fisheries within the region who wish to belong; and
- (3) it possesses a board of directors which includes no less than one representative of each user group that belongs to the association.

(b) In this section "user group" includes, but is not limited to, sport fishermen, processors, commercial fishermen, subsistence fishermen, and representatives of local communities.

(c) A qualified regional association, when it becomes a nonprofit corporation under AS 10.20, is established as a service area in the unorganized borough under Alaska Statute 29.03.020 for the purpose of providing salmon enhancement services.

Alaska National Interest Lands Conservation Act - Federal legislation to provide for the designation and conservation of certain public lands in Alaska, and for other purposes.

Forest Service Manual - A component of the Forest Service Directives System. The Forest Service Manual is the basic guide to all programs and activities. The Forest Service Manual sets broad policy and guidance for all program activities within the Forest Service.

Monitoring - An evaluation process to determine how well objectives have been met.

National Environmental Policy Act of 1969 - Federal legislation to declare a national policy which will encourage productive and enjoyable harmony between people and their environment.

Regional Aquaculture Associations - see Alaska Statute 16.10.380, above.

Regional Comprehensive Salmon Plan - see Alaska Statute 16.10.375, above.

Regional Comprehensive Salmon Plan, Phase I - Sets goals and objectives for salmon production in the region for the planning period (1980-2000), and establishes the background and philosophy for enhancement.

Regional Comprehensive Salmon Plan, Phase II - Specific plans for Northern Southeast and Southern Alaska that identify and prioritize enhancement opportunities within the southeast region.

Regional Five-Year Action Plan - This plan prioritizes recommended enhancement opportunities identified in the Phase II Comprehensive Salmon Plans. Action Plans are dynamic planning tools that are annually updated through the Regional Planning Team process.

Regional Planning Team - see Alaska Statute 16.10.375, above.

Tongass Land Management Plan - A forest management plan that provides for the allocation of land to different primary uses and for multiple-use and sustained yield of goods and services from the National Forest.

Acronyms

ADF&G	Alaska Department of Fish & Game
ANILCA	Alaska National Interest Lands Conservation Act
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
PNP	Private Non-profit (hatchery operators)
RPT	Regional Planning Team (Salmon Planning)
TLMP	Tongass Land Management Plan

Cooperative Fisheries Planning Status Report